

CLAIMS

1. A method of searching through a plurality of stored documents, the method comprising:
 - 5 storing the plurality of documents;
 - storing a representation of an ontology, the ontology comprising a plurality of inter-related nodes and being divided into at least two distinct sub-spaces;
 - for each of the plurality of documents, storing at least one association with a node of a first distinct sub-space of the ontology and at least one association with a node of a
 - 10 second distinct sub-space of the ontology;
 - controlling a user interface to permit a user to input up to at least two search terms using free text entry and to associate the or each search term with a respective distinct sub-space of the ontology;
 - comparing the or each input search term with nodes of the corresponding sub-
 - 15 space only, in order to attempt to determine one or more possible matches or partial matches; and
 - selecting one or more of the stored documents based on the or each possibly matched or partially matched node and the stored associations between the stored documents and the nodes of the ontology for presentation to the user.
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2. A method of storing a plurality of electronic documents comprising:
 - generating in respect of each electronic document at least one association with a node of a first type of node and at least one association with a node of a second type of node, the nodes belonging to a predetermined ontology which has the property that a sub-
 - 25 tree of a node of a given type contains only nodes of that same given type;
 - and storing the pair or group of associations generated in respect of a particular document in addition to the document in a digital memory in such a way that the associations can be readily linked to the corresponding document.
- 30 3. A method as claimed in claim 1 or claim 2 wherein the first sub-space contains verb nodes or the first type of node is a verb node and the second sub-space contains noun nodes or the second type of node is a noun node.

4. A method as claimed in claim 1, 2 or 3 wherein the associations are stored in an index for efficient searching together with an identification of the document to which each pair or group of associations relates.

5. A method as claimed in any preceding claim wherein the documents include a natural language description of a service.

6. A method as claimed in any one of the preceding claims further comprising generating a relationship identifier identifying one of a finite number of distinct possible relationships between a node within the first sub-space or of the first type and a node of the second sub-space or of the second type and storing said relationship identifier together with the pair or group of associations.

7. A method of retrieving one or more electronic documents from an electronic storage means storing a plurality of electronic documents, the documents having been stored in accordance with the method of claim 2 or any claim when dependent on claim 2, the retrieval method comprising:

receiving an electronic signal representative of a search request including at least a first term associated with a first type of node and at least a second term associated with a second type of node of a predetermined ontology;

comparing the first term with a plurality of nodes of said first type and comparing the second term with a plurality of nodes of said second type and, in the event of determining at least a partial match, attributing a degree of match to each such node;

generating at least one translated search request comprising at least one of said matched nodes of said first type, at least one of said matched nodes of said second type and the degree of match associated with each;

comparing each matched node of the or each translated search request with the corresponding node of the same type identified by the stored pair or group of associations corresponding to each of the stored electronic documents;

selecting documents for retrieval on the basis of the result of the comparison between the translated search request or requests and the stored pair or group of associations; and

outputting an electronic signal representative of, or identifying, the or each selected electronic document.

8. A method of generating a search request for use in the method of claim 7, the search request generating method comprising:

controlling a user interface to request from a user a first term;

controlling the user interface to request from the user a second term;

5 controlling the user interface to request the user to choose one of a plurality of possible relationship types to express the relationship between the first and second terms; and

generating a search request based on the information entered by the user.

10 9. Apparatus for storing and retrieving electronic documents comprising:

an electronic data store comprising means for storing a plurality of electronic documents;

further electronic data storage means for storing a pair or group of associations associating each electronic document with at least one node of a first type and at least
15 one node of a second type of a predetermined ontology;

request generation means for generating a search request comprising a first term and a second term;

translation means for generating a translated search request or requests by comparing the first term of a search request with nodes of the first type and comparing the
20 second term of the search request with nodes of the second type to find specific nodes which correspond to the terms of the search request; and

comparison means for comparing the or each translated search request with each stored pair or group of associations and selecting those documents for which a sufficiently close match is determined.

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10. Apparatus according to claim 9 wherein the electronic data store also comprises the further electronic data storage means.

11. An electronic data store for use in the apparatus of claims 8 or 9, the data store
30 storing a plurality of electronic documents and a pair or group of associations associating each electronic document with at least one node of a first type and at least one node of a second type of a predetermined ontology.

12. A computer program for carrying out the method of any one of claims 1 to 7.

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13. Carrier means carrying the computer program of claim 12.